TORONTO WATERFRONT DEVELOPMENT

1912 – 1920

JAMES W. SOMERS

TORONTO
WATERFRONT DEVELOPMENT
1912 - 1920

THE TORONTO HARBOR COMMISSIONERS

76 ADELAIDE STREET WEST
TORONTO, ONT.

LIONEL H. CLARKE, CHAIRMAN
THOS. L. CHURCH — R. HOME SMITH
ROBERT S. GOURLAY — FRANCIS S. SPENCE

E. L. COUSINS, *Engineer*
ALEX. C. LEWIS, *Secretary*
COLIN W. POSTLETHWAITE, *Harbormaster*

THE CONDITION OF TORONTO'S WATERFRONT WHEN THE HARBOR
COMMISSIONERS TOOK CHARGE OF IT IS SHOWN BY
THE PLAN ON THE OPPOSITE PAGE

A-B

WESTERN SECTION

ROADWAY

THE · TORONTO · HARBOR · COMMISSIONERS ·

ENGINEERING DEPARTMENT

SCALE, 300 FEET TO 1 INCH

CHAIRMAN.

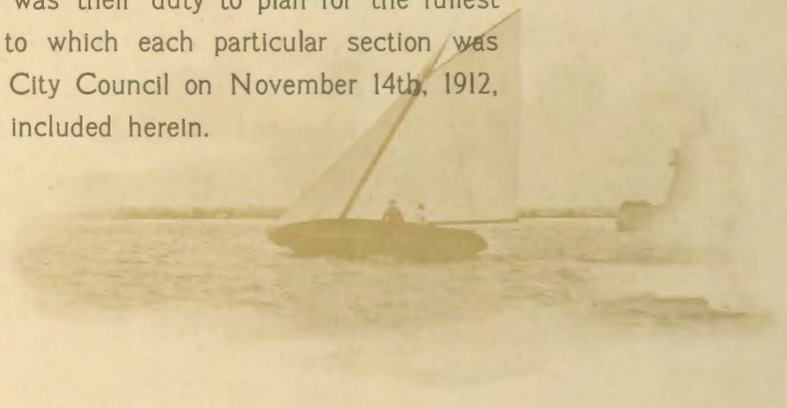
D
C
HARBOUR
LAKE ONTARIO
B-C
Central Section
C-D
Eastern Section
Scale 300 feet to 1 inch

As its principal contribution towards the improvement work which the commissioners were expected to undertake the city deeded to the commissioners all the land owned by it along the waterfront, including the Ashbridge Bay District of one thousand acres, the bay shore of the Island, many properties along the front of the inner harbor and all the waterlots on the lakefront from Bathurst Street to the Humber River. This property has been valued at nine million dollars, and from it is derived a revenue of $65,000,00, the greater portion of it, at the time of the transfer, being in an undeveloped state.

The New Commission

The new commission consists of five members, all serving without remuneration, each appointed to serve for three years, of whom three are the appointees of the City Council, viz.:—Messrs. L. H. Clarke, T. L. Church and R. Home Smith; one, Mr. F. S. Spence, is the direct representative of the Dominion Government, and one, Mr. R. S. Gourlay, is the representative of the Board of Trade appointed by the Government on the nomination of that board. The five members were appointed in August, 1911. The city property was transferred to the commissioners in December of the same year. In February Mr. E. L. Cousins was appointed Chief Engineer for the commissioners, Mr. J. G. Sing was secured as Consulting Engineer, and active work on the preparation of proper plans for the development of the harbor and waterfront was commenced.

While the commissioners were appointed primarily for the purpose of controlling and developing the harbor proper and the adjoining industrial areas, the property conveyed to them by the city included lands, particularly the waterlots to the west of Bathurst Street, on which the joint development of harbor work, shore protection and park treatment could be carried out coincidently and economically, and the commissioners felt that it was their duty to plan for the fullest possible development of all the property placed in their charge along the lines to which each particular section was best suited. The result of this policy is shown on the plans submitted to the City Council on November 14th, 1912, and to the Dominion Government at the same time, copies of which plans are included herein.



Three Classes of Development : : The commissioners are convinced that with the carrying out of the work projected by them the Harbor of Toronto will be second to none on the Great Lakes, and will be the equal of almost any harbor on either the Atlantic or Pacific coasts, that proper facilities will have been provided for the encouragement of water borne traffic, and that Toronto will possess a lakefront parkway and boulevard drive which will not be surpassed by anything on the American Continent.

The plans provide for development along three lines:--

1. Industrial Development in the Ashbridge Bay District and on a seventeen-acre area at the foot of Bathurst Street.
2. Commercial and Dock Development at both these points and on the Central waterfront.
3. Park and Boulevard improvements along the twelve miles of outer waterfront from Woodbine Avenue to the Humber River, with a protected waterway from the Humber on the west to Victoria Park on the east. A preliminary estimate places the total cost of the entire project at $19,142,088.00, to be borne by the Dominion Government, the City of Toronto and the Commissioners in proportions varying according to the object of the different works.

The engineer has estimated that the entire work can be carried to completion within eight years from the commencement of active operations, and this estimate has been based on such conservative figures that the commissioners believe it will not be exceeded.

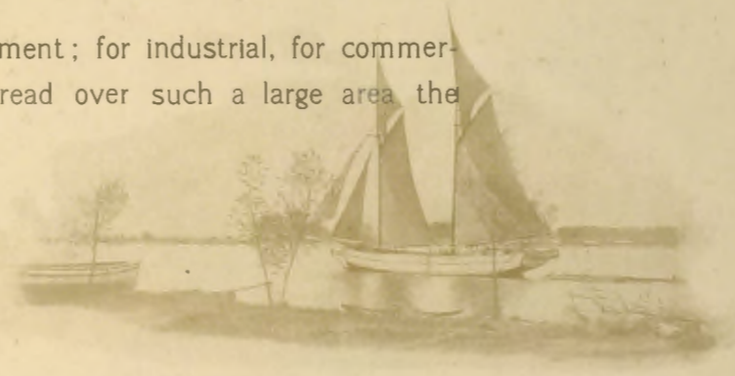
When the commissioners assumed their duties they found no plans in existence upon which improvements could be worked out, and they proceeded to secure at once the data needed for a foundation upon which broad and sufficient plans for harbor and waterfront improvements could be formed. Active operations for this purpose were commenced

early in February and a complete survey was made of the waterfront from Scarboro town line at the east city limit to the Humber River which marks the limit of the city at the west; a distance in all of ten miles. At the same time advantage was taken of the presence of the ice on the inner harbor and Island lagoons for the purpose of making a hydrographic survey, in the course of which 8,000 soundings were taken to ascertain the depth of water, and 150 borings were made through to the rock which underlies the harbor in order that the engineers might know exactly what ultimate depth of water was obtainable and the class of material in which the foundations included in the improvement plans would have to be constructed. Upon the completion of this preliminary work the engineers commenced the planning of improvements on a large scale, and the commissioners met constantly throughout the entire summer in order to consider the various portions of the plans as each was worked out and submitted to them, and in order to have the benefit of the most modern practise in planning for Toronto the commissioners and the principal officials visited all the important works of a similar nature at various cities in Canada and the United States.

Some Difficult Work : :

One of the most difficult sections to handle was found in the Ashbridge Bay District where a proper development had to provide for industrial locations, harbor extension and commercial facilities in such an economical manner as would enable the commissioners to place the land on the market at a reasonable rate. Fourteen different studies of this section were prepared before the final solution was reached, and five different studies of the entire waterfront improvement were prepared by the engineer before a final decision was arrived at. The result is the plan which has been approved by the Federal Government, the City Council and the public of Toronto generally.

As previously intimated, the plans adopted provide for three classes of development; for industrial, for commercial and for recreation. In order to intelligently deal with the works which will spread over such a large area the waterfront has been divided into three sections.



WHEN THE DEVELOPMENT PLANNED BY THE HARBOR COMMISSIONERS FOR THE HARBOR AND WATERFRONT IS CARRIED OUT THE RESULT WILL BE THE BEAUTIFUL PICTURE SHOWN HERE; THE COMPLETE WORK IS ESTIMATED TO COST $19,000,000

·THE·

·TORONTO·HARBOR·COMMISSIONERS·

—ENGINEERING DEPARTMENT—

·WATERFRONT·DEVELOPMENT·

·SCALE:-300·FEET·TO·1·INCH·

(R.F. 1:3600)

·ENGINEER.

·CHAIRMAN.

·CONSULTING·ENGINEER·

·CONSULTING·LANDSCAPE·ARCHITECT·

SCALE. 300 FEET TO 1 INCH

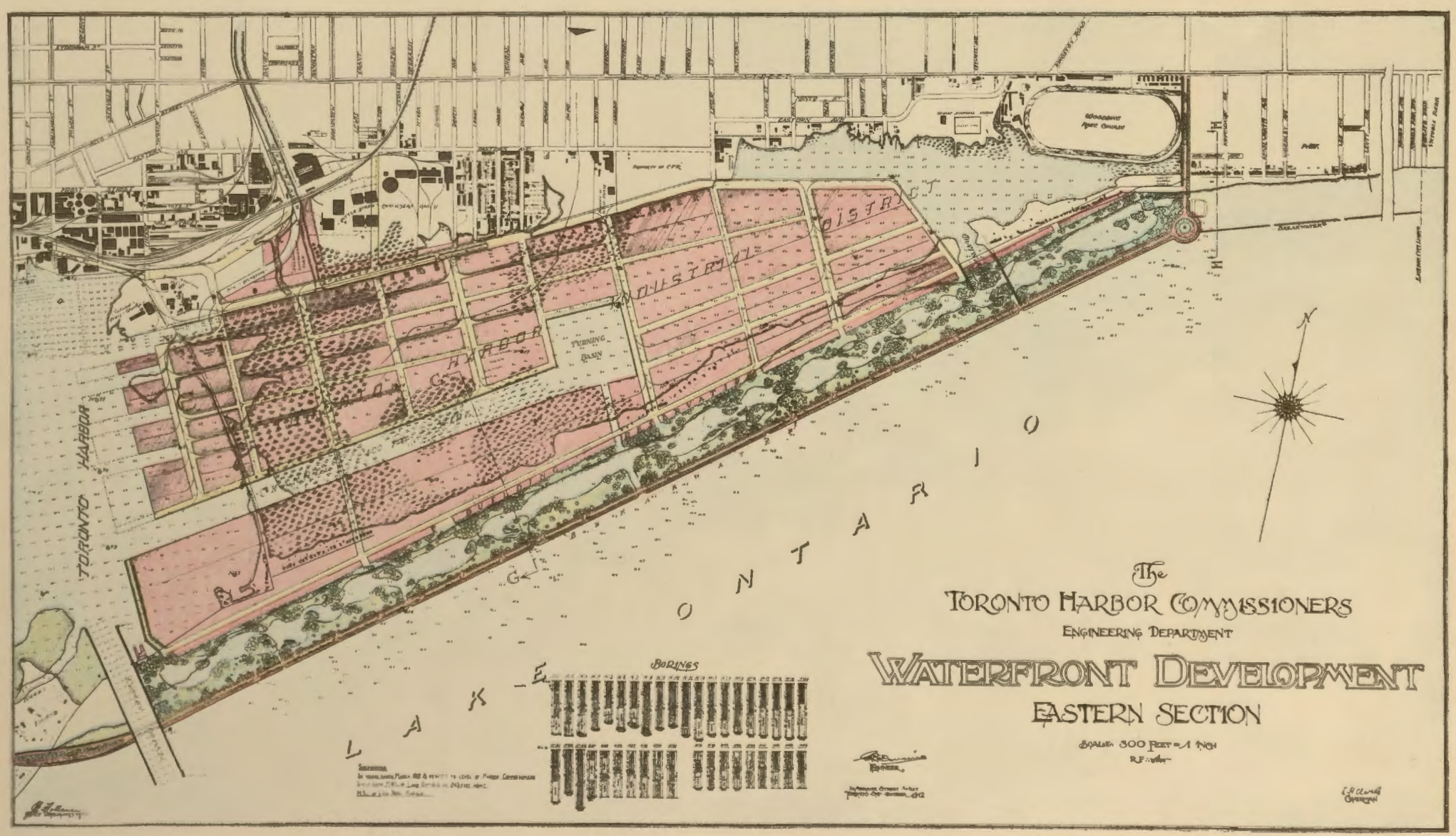
The Eastern Section includes all the district lying east of a line drawn from Parliament Street to the Eastern Entrance to the harbor, and extending east to the east city limit.

The Central Section takes in the district between Parliament Street and Bathurst Street, and includes the waterfront of the inner Harbor and the bay shore of the Island.

The Western Section deals with all the property from Bathurst Street to the Humber River.

EASTERN SECTION

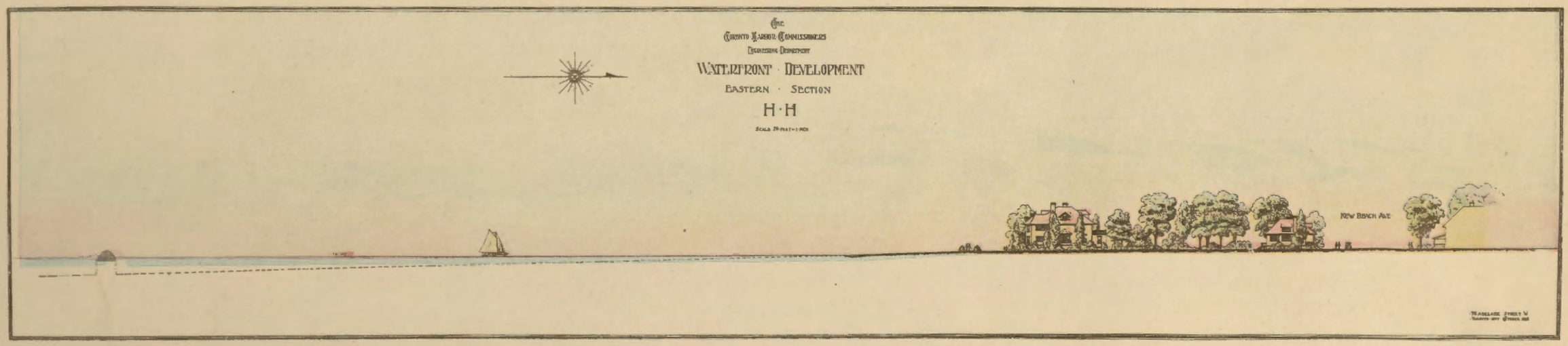
Shore Protection Necessary : : The work projected for the Eastern Section includes all three classes of the development planned. The principal work will be the reclamation of the district known for many years as Ashbridge Bay, but which has been re-named and will in the future be known as the "Toronto Harbor Industrial District." Along the south face of this district there exists at the present time a low, narrow sandbar, which forms the north shore of Lake Ontario at this point. Many portions of this bar are frequently submerged during periods of high water, and there is a constant shore erosion as a result of the heavy storms from the east which attack it. One of the most necessary portions of the work of carrying the harbor extension into the district is the protection of the shore, and this will be done by means of a breakwater which will be constructed along the entire front, a distance of four and one-third miles, and at an average distance of 700 feet south from the present shore line. With this protection assured, the work of reclaiming the marsh lands will be commenced, and the two works will be carried on at the same time, the filling being placed in the portion of the district behind each section of wall as the wall construction proceeds.


INDUSTRIAL DISTRICT
HARBOUR
TURNING BASIN
TORONTO HARBOUR
LAKE ONTARIO
BORINGS
N
The
TORONTO HARBOR COMMISSIONERS
ENGINEERING DEPARTMENT
WATERFRONT DEVELOPMENT
EASTERN SECTION
SCALE: 300 FEET = 1 INCH

A Big Dredging Proposition : : The Eastern section, with the exception of the part lying east of Woodbine Avenue, will be filled to an elevation of eight feet above mean water level, and to do this work will require 27,000,000 cubic yards of material. This can all be secured from the bed of the inner harbor and from the bottom of the lake outside the sea wall. Two large hydraulic dredges will be employed in pumping this filling into the district as the wall is constructed. This will be the largest dredge work ever undertaken in Canada, and the dredges employed will be amongst the most powerful that the American Continent has so far known. The machinery will be of 2,000 H. P. of the latest improved type, and each dredge will be capable of digging either sand or clay from a depth of 50 feet, and pumping it for a distance of 4,000 feet through lines of pipe, from which it will be distributed to the area to be filled. The dredges will be of steel, of regular ocean-going steamship type, will be propelled by twin screws and will be controlled by steam stearing gear.

The Industrial area proper will be north of a line drawn east and west and 1,000 feet back from the breakwater. This line will be marked by a street 66 feet in width, which will divide the Industrial District from the park area to the south. Immediately south of this street will be a tier of lots 100 feet in depth and extending for over three miles along the north face of the park area, which lots will be reserved as locations for summer homes. In front of the cottage reservations will be a park district and a bathing beach fronting on a lagoon patterned after the natural lagoons in the interior of the Island. This lagoon will be crossed by numerous foot bridges in order to give the public free access to the park lands, boulevard driveway and promenade, which will be constructed immediately behind the breakwater. The driveway will be fifty feet in width, and in addition there will be a bridle path, concrete walks and boulevard areas to make up a total width of 200 feet.

The breakwater itself will be broken at intervals of 2,000 feet by openings forty feet wide and with eight feet of headroom, which will allow small craft ingress and egress, and ample provision has been made for the erection of public bath-houses and also for locations for aquatic clubs along the beach.



FROM WOODBINE AVENUE TO THE EAST CITY LIMIT THE COMMISSIONERS PROPOSE TO BUILD A BREAKWATER, DISTANT ABOUT FIVE HUNDRED FEET FROM THE SHORE, FOR THE PURPOSE OF PROTECTING THE SHORE AND PROVIDING A PROTECTED ENCLOSURE

North of the roadway will lie the Industrial District, the development of which is so planned that when it is completed there will be 646 acres of land available for factory sites, 235 acres occupied by streets and railroad reservations and 130 acres of waterways. The thirty miles of roadways will have a minimum width of 75 feet and a maximum width of 175 feet. The district will be served by thirty miles of railway tracks connecting with all three railroads which at present enter Toronto, and provision will be made for a connection with any lines which may enter the city in the future.

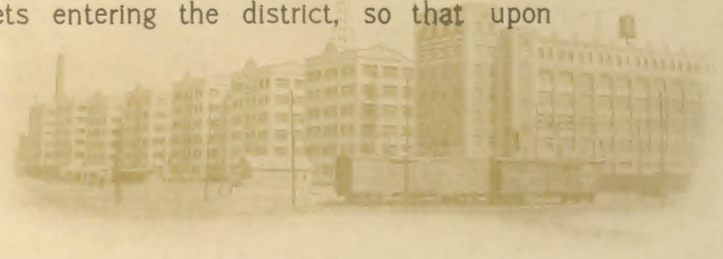
The railway layout has been so arranged that every alternate street will be free from tracks and the siding service on the railroad reservations will be on a three-track system, so that there will be no disturbance of a car placed for one shipper in order to place one or remove one at the wish of another.

Accommodation for the Largest Boats

A ship channel will be constructed into the district for a distance of 6,800 feet, terminating in a turning basin 1,000 feet square and the sides of both the channel and turning basin will be so constructed as to form over three and one-half miles of dockage accommodation. This channel will be 400 feet wide and the depth will be made to conform to the depth of the new Welland Canal in order that any shipping which can enter Lake Ontario will be able to secure ample accommodation in Toronto Harbor.

The Western or Bay face of this Eastern Section will be developed for dock purposes as the district grows and will ultimately add two additional miles to the dock frontage of the area as shown on the plan. One large dock is now being constructed and will be equipped with modern freight sheds, and a storage warehouse and the first of a series of factory buildings will be erected back of the dock at an estimated cost of $409,000.00.

The plans for the Eastern Section also provide for the utilization of all the present streets leading south from King Street and Eastern Avenue, and for the creation of two new streets entering the district, so that upon



THE
TORONTO HARBOUR COMMISSIONERS
ENGINEERING DEPARTMENT

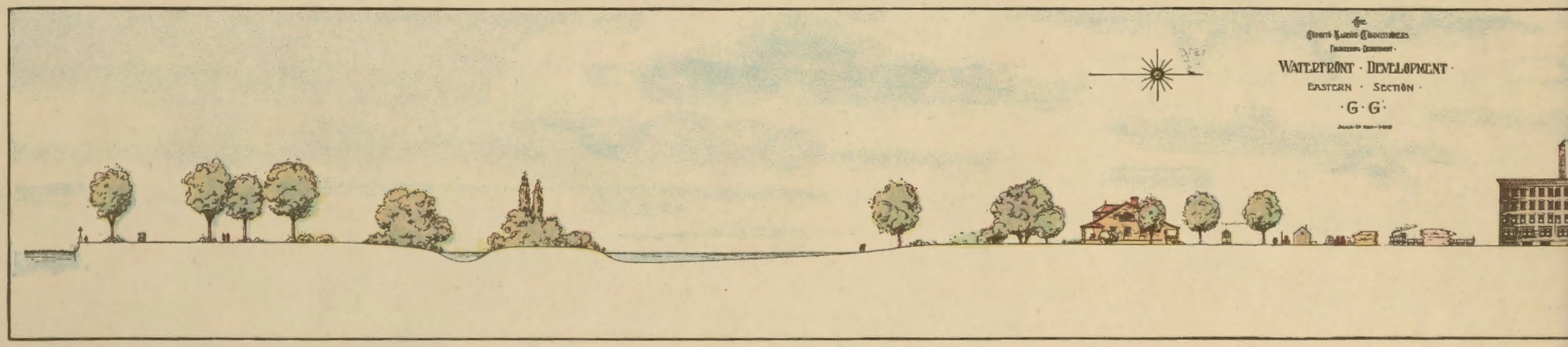
WATERFRONT DEVELOPMENT

TYPICAL EASTERN & WESTERN ENTRANCE BRIDGES

SCALE 20 FEET 1 INCH

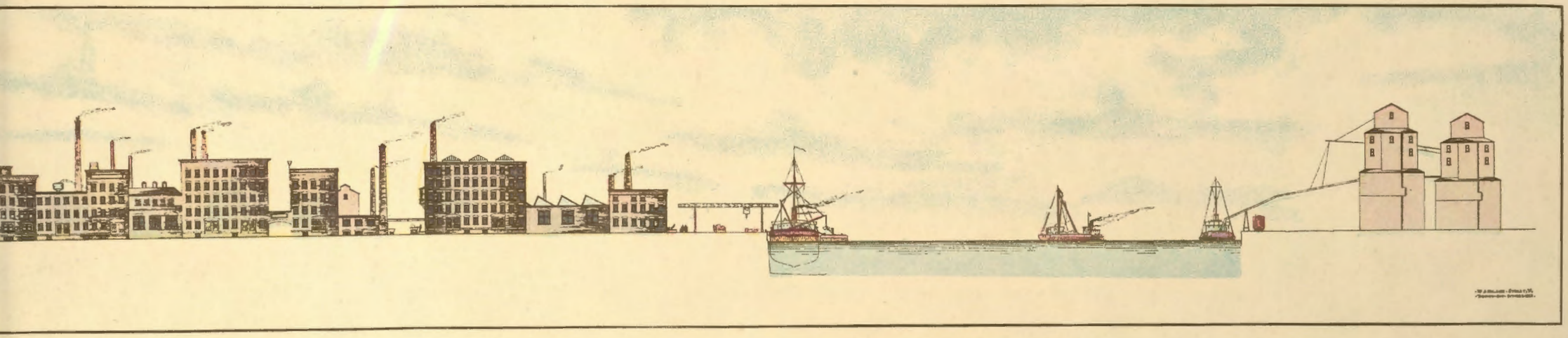
76 ADELAIDE STREET W.
TORONTO OCTOBER 1912

TYPE OF ROLLER LIFT BRIDGE ON WHICH THE BOULEVARD AND DRIVEWAY WILL BE CARRIED ACROSS THE CHANNEL ENTRANCES. THIS VIEW SHOWS A BRIDGE IN POSITION ACROSS THE NEW WESTERN CHANNEL



THIS SHOWS A TYPICAL CROSS-SECTION OF THE D

FROM LEFT TO RIGHT, THE PLAN SHOWS F
RESERVATIONS AND INDUSTRIA
HUNDRED



ELOPMENT PLANNED FOR THE EASTERN SECTION

K AND LAGOON TREATMENT, SUMMER COTTAGE
DEVELOPMENT TO THE FOUR
OT CHANNEL

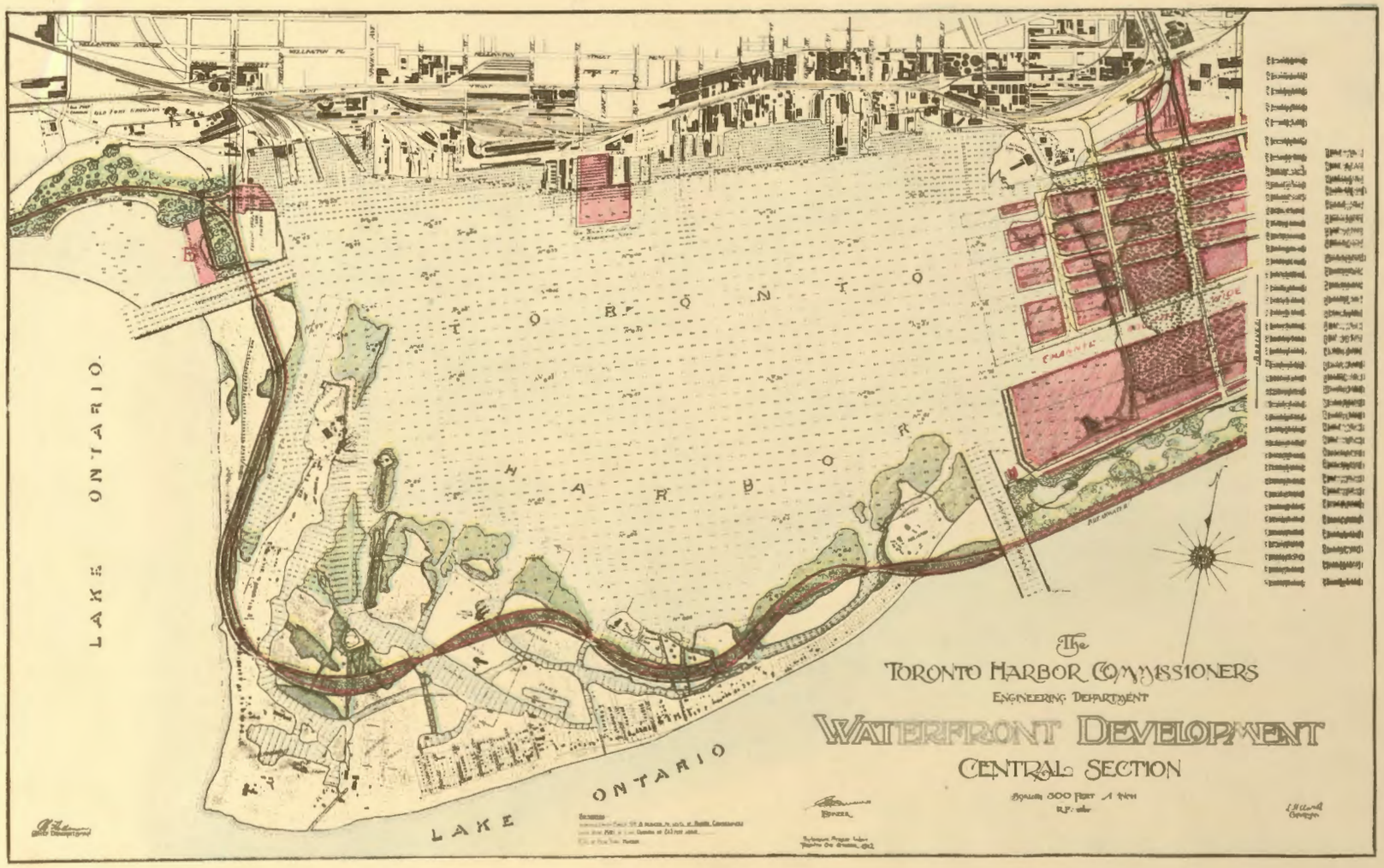
completion of the work it will be possible to enter or leave this immense field of factories by means of ten streets leading to the main east and west city thoroughfare.

The district has been so laid out that the area north of the ship channel will be reserved for light manufacturing plants, the area to the east of the turning basin will be the home of heavier plants which do not require direct water access, while south of the channel will be located the heaviest class of manufacturing industries which require a frontage direct on navigable water.

The width of the channel, 400 feet, will allow a vessel of the largest freight type to pass safely through it between two vessels of equal size tied up at each side.

CENTRAL SECTION

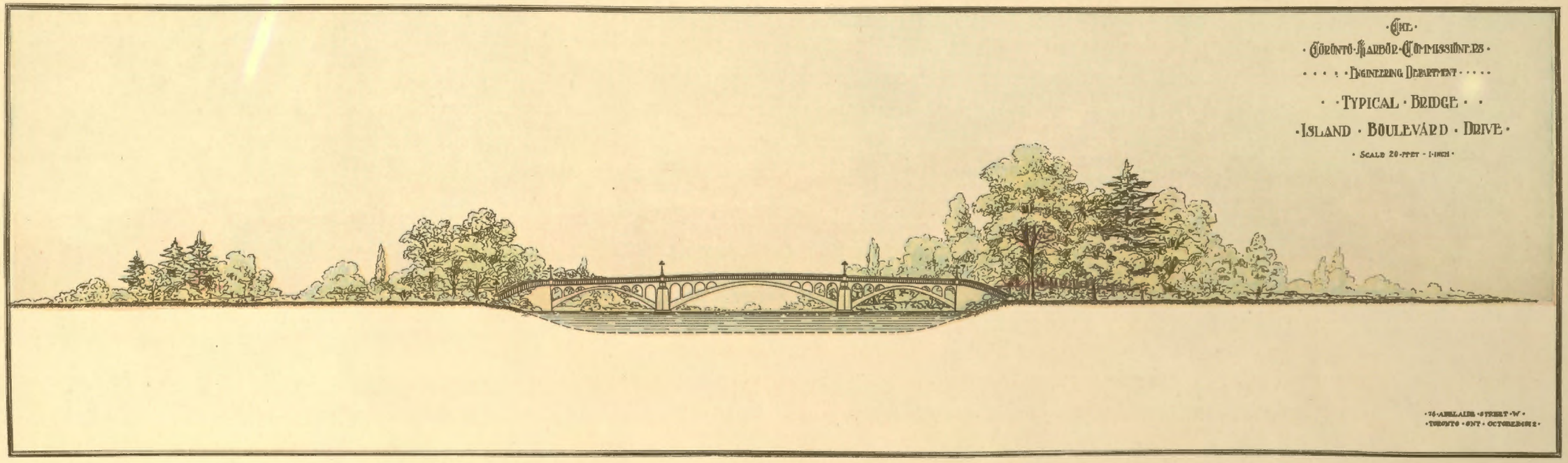
In the Central Section the work consists almost entirely of commercial and park development, with one area covering seventeen acres at the foot of Bathurst Street, suitable for industrial development. The most urgent portion of the work is the encouragement of commerce by means of a proper wharfage service. This is now being provided at the east end of the harbor by the new dock being constructed in the Eastern Section. Similarly at the foot of Bathurst Street work is now being carried on which will provide a dock with 20 feet of water, and behind which will be land suitable for light manufacturing plants and also for the erection by the commissioners of a storage warehouse and a factory building, in which space will be rented to small manufacturing concerns. The sum of $409,000 will be expended by the commissioners in providing this warehouse and factory accommodation at this point.


TORONTO
HARBOR
LAKE ONTARIO
LAKE ONTARIO
The
TORONTO HARBOR COMMISSIONERS
ENGINEERING DEPARTMENT
WATERFRONT DEVELOPMENT
CENTRAL SECTION

For the proper development of the central dockage facilities the commissioners plan to spend the sum of $1,785,000 in the construction of modern docks in the area from Bay Street to York Street with an adequate equipment of freight sheds and storage warehouses, but the details of this construction cannot be worked out until the question of the separation of railway and highway grades along the waterfront has been definitely settled. In connection with this work for the encouragement of water traffic the entire inner harbor will be dredged to a uniform depth in order to accommodate any lake vessel.

Island Reclamation The other work planned for the Central Section consists of the reclamation of 352 acres of additional park lands on the Island, a portion of which will serve as a location for the boulevard drive and the balance will improve certain portions of the Island which are at present neither sightly nor useful. The driveway will be carried from the east across the Eastern Harbor Entrance by means of a roller lift bridge, and will follow a winding course through the north portion of the Island lands, at some places close to the Bay shore, and at other points diverging towards the interior. The principal lagoons will be crossed by means of bridges with sufficient headroom above the water to permit of the passage of small ferries, and these lagoons will be improved in such a manner as to allow the establishment of a belt line ferry service from the city through the interior waterways of the Island, touching at different points from end to end.

The Western Harbor Entrance will be crossed in the same manner as is proposed for the east, and on the large areas of land to the north and south of this entrance will be provided new park areas and also a location for aquatic clubs fronting on the western protected waterway.



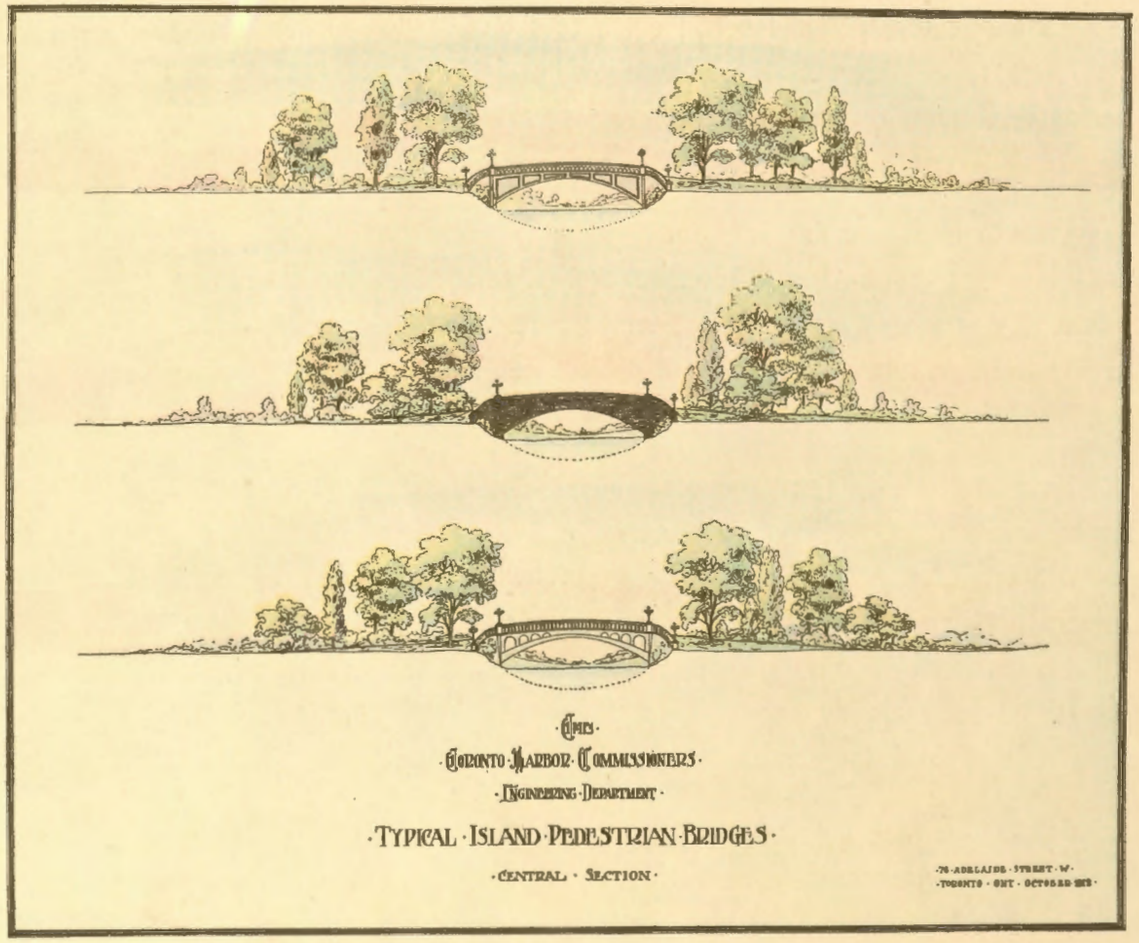
TYPE OF BRIDGE WHICH WILL CARRY THE BOULEVARD AND
DRIVEWAY OVER THE ISLAND
LAGOONS

WESTERN SECTION

From Bathurst Street west to the Humber the treatment is almost entirely shore protection and park reclamation work, the only provision for development of a commercial nature being in the district from Sunnyside Crossing to the Humber, where a tier of lots is being reserved as a location for refreshment privileges and other amusement features, which are incidental to the development of a summer resort watering place.

A breakwater will be constructed from a point 200 feet west of the north pier of the Western Channel to a point at the mouth of the Humber River and distant an average of 900 feet south from the existing shore line. This breakwater is urgently needed to prevent the destruction of the shore and the Lake Shore Road, which suffers heavily from every south east or south west storm. Inside this breakwater will be a protected waterway, with an average width of 500 feet, reaching from the Humber to Bathurst Street and linking up with the Island lagoon system and the new lagoon system planned for the Eastern Section, so as to form a complete protected waterway, fourteen miles in length, across the entire city front. Inside this waterway boats will be in perfect safety no matter what the weather is on the lake, and the section west of Bathurst Street will be available for a ferry service to the Exhibition Grounds and the Humber River.

The old Western Harbor Entrance will be filled up, and the boulevard driveway, after crossing the new Western Entrance, will be carried north to this newly filled land and will there divide into two branches, one branch running straight north to connect with Bathurst Street and the other continuing the driveway along the lake front to the west. A recreation and passenger dock, 300 feet long, double deck, will be constructed at the Exhibition Grounds.



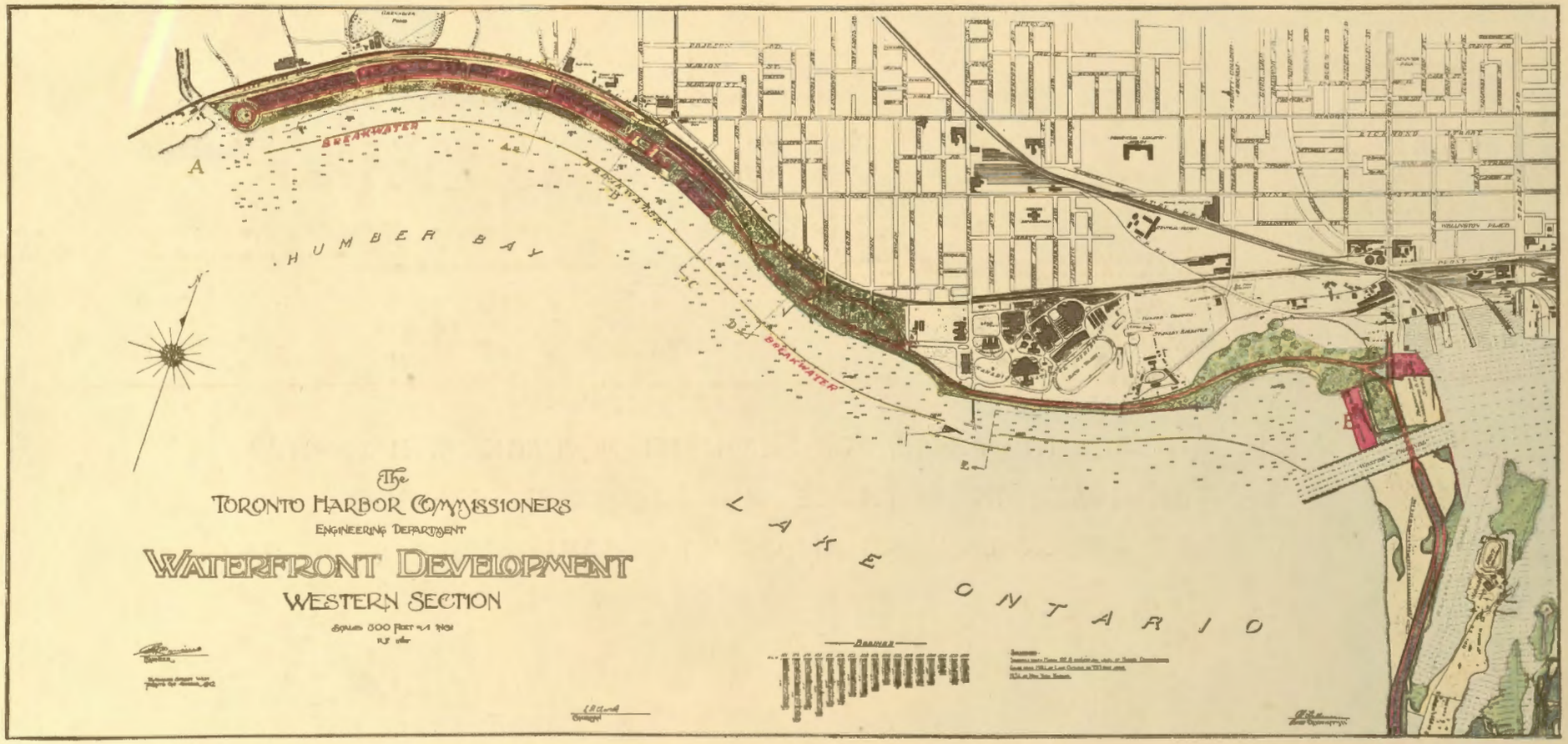
THREE DIFFERENT TYPES OF BRIDGES
WHICH WILL LINK TOGETHER THE
SMALL ISLANDS IN THE NEW
PARK TREATMENT

A Fine View over Lake Ontario : : West of the Exhibition Grounds the driveway is carried to the top of the high bank, from which a splendid view over the lake is afforded, and will continue along this high bank to a point just east of Sunnyside Station, where it will descend again to the elevation of eight feet above the lake and will be carried at this elevation through to the Humber River, where connection will be made with the boulevard and driveway to be constructed by the city up the Humber Valley.

From Sunnyside to the Humber, a distance of slightly over a mile, one of the most interesting portions of the work planned by the Commissioners will be carried out. Provision will be made for a four-track radial railway entrance to the city from the West on an elevation equal to that occupied by the G.T.R. Tracks. From these radial tracks connection can be made at a later date, if desired, with any subway system from Sunnyside to the centre of the city. This reservation will be eighty feet wide; its southerly limit will be an average of thirty feet south of the present Lake Shore Road.

Creating a New Summer Resort A new sixty-six foot street will be provided to replace the present Lake Shore Road, and south of this new street will be the reservation for commercial purposes previously mentioned. The buildings erected on this area will front on a terrace, fifty-five feet wide, and at an elevation eight feet above the boulevard and driveway and sixteen feet above the lake. This terrace will be equipped with wide concrete walks at both sides and a park-treatment in the centre, and will be divided from the boulevard proper by a concrete retaining wall and parapet broken at short intervals by openings forty feet in width, through which there will be access by means of broad concrete steps to the lower promenade and boulevard.

Outside the boulevard and driveway, which includes also throughout its whole length promenade walks and bridle path, there will be a fine sand bathing beach, fronting on the protected waterway for a distance of about a mile and


BREAKWATER
BREAKWATER
BREAKWATER
HUMBER BAY
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The
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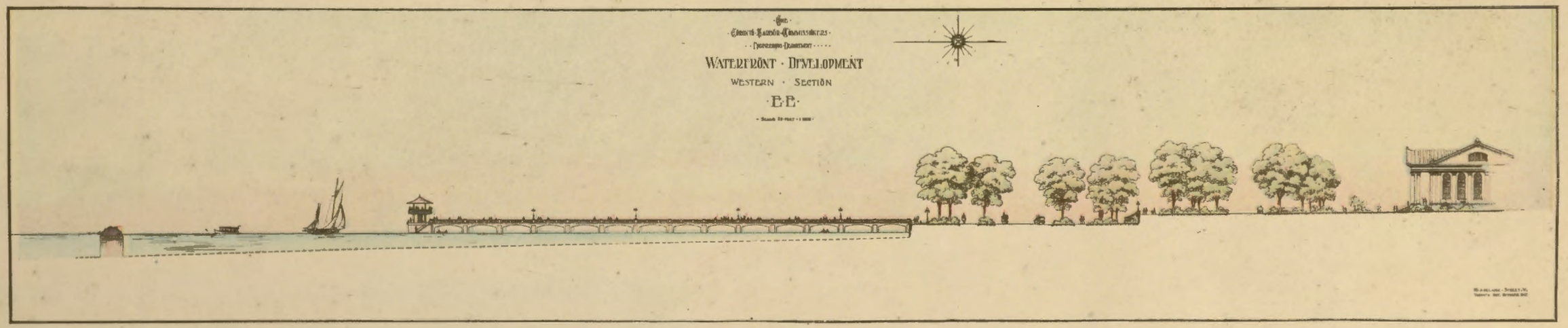
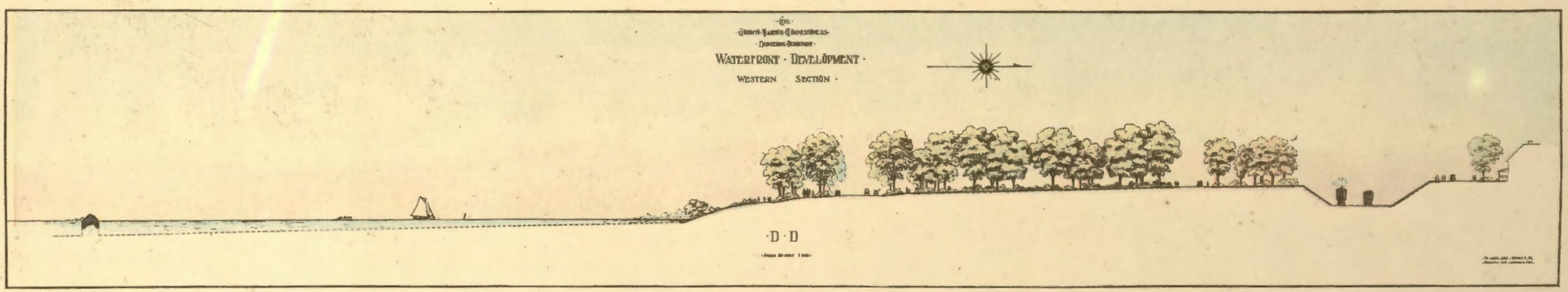
ENGINEERING DEPARTMENT
WATERFRONT DEVELOPMENT
WESTERN SECTION



ARCH BRIDGE IN FRONT OF EXHIBITION PARK WHICH WILL TERMINATE IN A THREE HUNDRED FOOT DOUBLE DECK LANDING AND RECREATION PIER

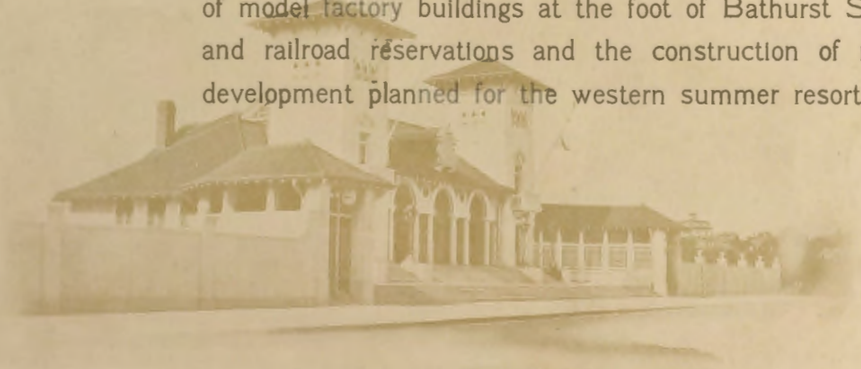


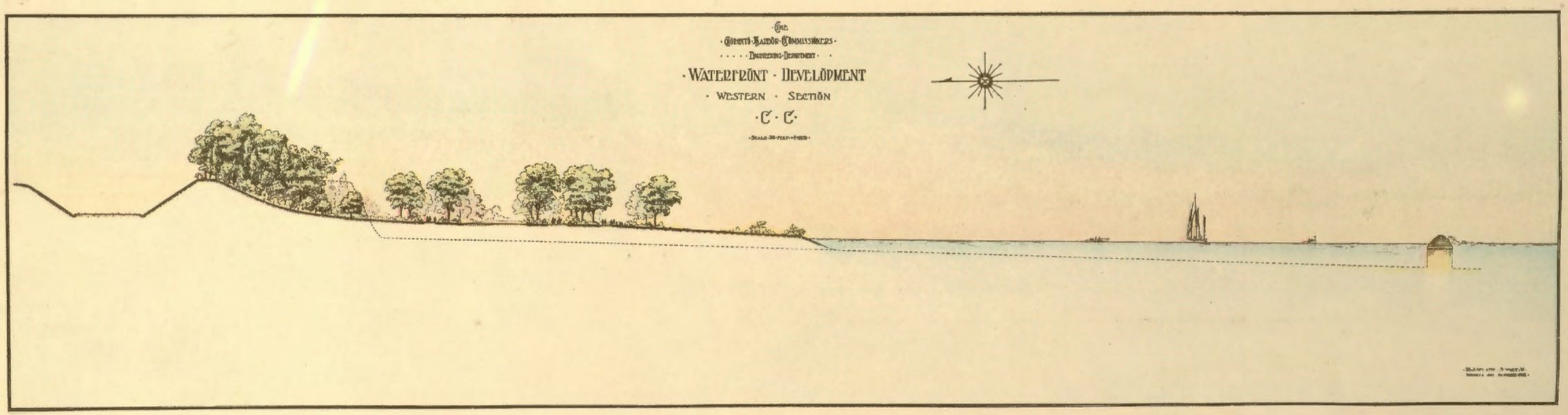
CROSS-SECTION SHOWING DEVELOPMENT IN THE WESTERN SECTION AT THE FOOT OF DOWLING AVENUE. THE BOULEVARD WILL BE ON THE HIGH BANK OVERLOOKING A PROTECTED WATERWAY, WITH THE BREAKWATER AT THE LEFT SIDE OF THE PICTURE

a quarter, and provision has been made for the erection of a modern and artistic public bath-house in connection with the beach. In all, 190 acres of new park lands will be reclaimed between Bathurst Street and the Humber.

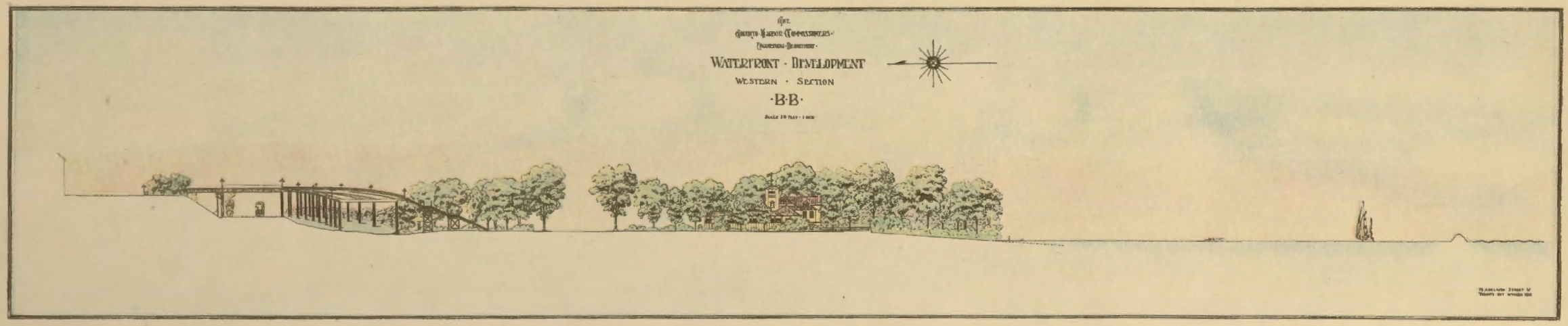
The City Council will construct the necessary highway bridge over the Don to provide proper entrance to the Industrial District in the east, and will build a retaining wall along the front of the Exhibition Grounds in the west in order to separate the grounds from the boulevard while the Exhibition is in progress, and will follow up this initial work by undertaking the construction of the necessary roadways, pavements and park features on the boulevard-drive, including Island bridges. The total cost of this portion of the work has been estimated by the Commissioners' engineer at $1,802,883.00.

Dominion Government's Share of the Work : : The work allotted to the Dominion Government is the construction of the ship channel and harbor extension in the Industrial District; the necessary shore protection at the east end of the inner harbor; the construction of the breakwater from the Eastern Harbor Entrance to the east city limit; the construction of the breakwater from the Western Harbor Entrance to the Humber River and the construction of the necessary lift bridges across the Eastern and Western Harbor Entrances and across the ship channel in the Industrial District. The cost of this work has been estimated at $6,123,284.00. The balance of the work consists of the necessary dredging for reclamation purposes all across the entire front of the city and including the filling of 1,000 acres in the Industrial District and the creation of 894 acres of new park lands, the construction of docks, freight sheds and warehouses in the east and west and on the central waterfront; the erection of model factory buildings at the foot of Bathurst Street and at the foot of Cherry Street; the laying out of roadways and railroad reservations and the construction of railroad facilities in the Industrial District, and carrying out the development planned for the western summer resort section.





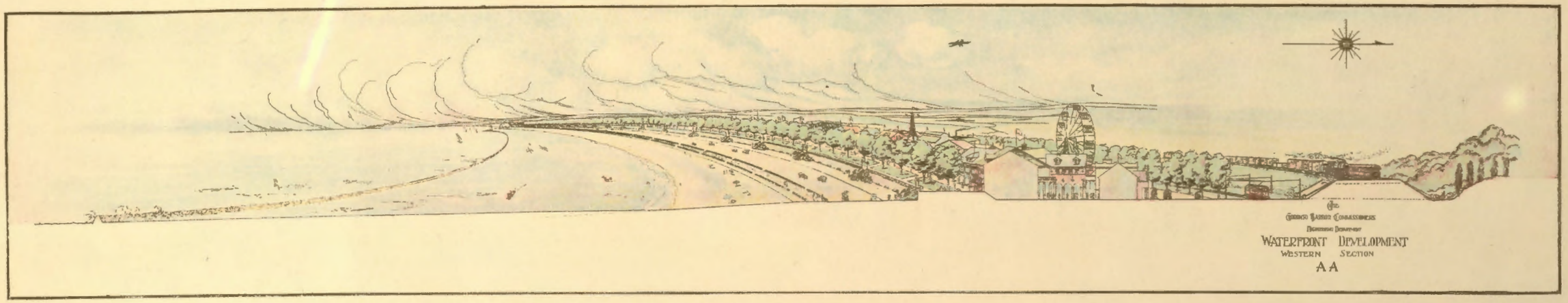
CROSS SECTION AT CLIFF ROAD WHERE THE BOULEVARD
DESCENDS TO THE LEVEL OF EIGHT FEET
ABOVE THE LAKE



WESTERN SECTION

LEFT TO RIGHT:

INTERSECTION OF KING STREET, QUEEN STREET AND RONCESVELLES AVENUE
SECTION THROUGH OVERHEAD BRIDGE, STEPS DOWN TO BOULEVARD
DRIVE, SUGGESTED TREATMENT FOR PUBLIC BATH HOUSES
PARK AND BEACH, PROTECTED WATERWAY,
BREAKWATER, LAKE ONTARIO



WESTERN SUMMER RESORT

PERSPECTIVE VIEW, LOOKING WEST FROM KEELE STREET AND INDIAN ROAD TO THE HUMBER RIVER

LEFT TO RIGHT:

LAKE ONTARIO, BREAKWATER, PROTECTED WATERWAY, BEACH, WALK, BRIDGE PATH, DRIVEWALK, WALK, STEPS TO WALK EIGHT FEET ABOVE BOULEVARD DRIVE, WALK, PARK, BOARDWALK FIFTEEN FEET WIDE RESERVATION FOR AMUSEMENT FEATURES, ETC. SIXTY-SIX FOOT STREET, EIGHTY FOOT FOUR TRACK RADIAL RAILWAY RESERVATION GRAND TRUNK RAILWAY SYSTEM AND HIGH PARK

The total cost of the Commissioners' portion of the work is estimated at $11,215,920.00, making a total expenditure from all sources on the work planned of $19,142,088.00.

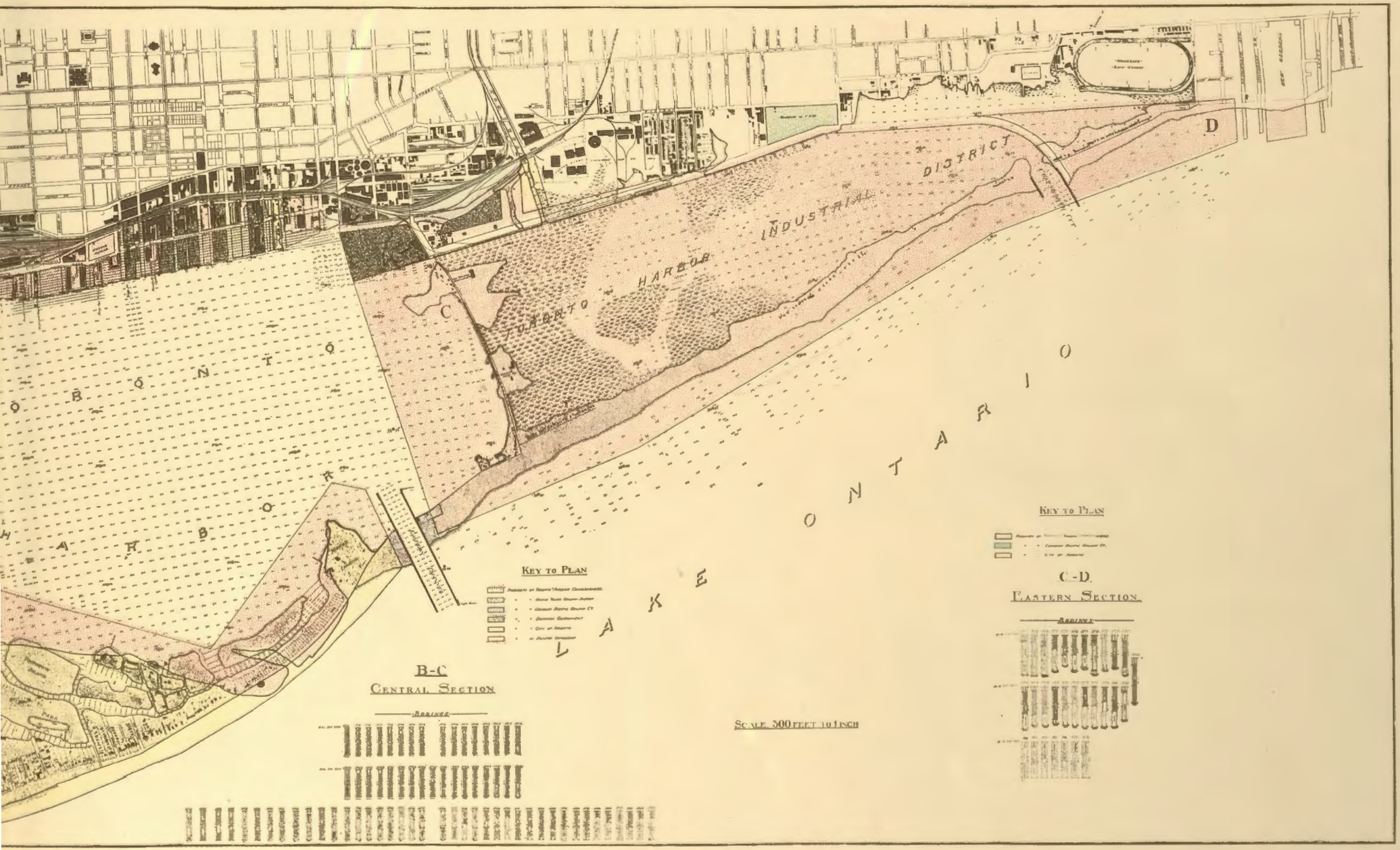
It has been conservatively estimated that the entire work can be carried to completion within eight years from date of commencement and the Commissioners confidently expect to present to the public within that time a remodeled water-front as shown on the plans now submitted.

BRIGDENS LIMITED, TORONTO

PLAN SHOWING THE OWNERSHIP

THE PROPERTY OWNED BY THE TORONTO HARBOR

COMPRISES OVER EIGHTY PER CENT.



TORONTO'S WATERFRONT

ISSIONERS IS SHOWN COLORED PINK AND

HE WATERFRONT PROPERTY